

Floor Pivot Reversion

Expert Advisor Documentation

| PLATFORM | TYPE | TIMEFRAME | WEBSITE |
|--------------------|----------------|----------------|--|
| MetaTrader 5 (MT5) | Mean Reversion | M15 (intraday) | www.algoBot.live |

⚠ Important Disclaimer This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

Overview

Floor Pivot Reversion is a pure price-level Expert Advisor that uses *no indicators* of any kind — no moving averages, no RSI, no ATR. Instead it trades the classic floor-trader **pivot points**: a fixed ladder of horizontal support and resistance lines computed once per day from the previous day's High, Low, and Close, then held static for the entire session. Because the levels are fixed at the start of each day, they never repaint.

The strategy is an intraday **mean-reversion** system. Price tends to oscillate between adjacent pivot lines, so Floor Pivot Reversion fades a level the moment a single candle shows that the level *held* — buying a bounce off support or selling a rejection at resistance, and targeting the next pivot line as a clean, structural take-profit.

Every distance the EA uses — the touch zone and the stop buffer — is scaled by the previous day's range, so the system adapts automatically to any symbol or volatility regime without ever needing to know the instrument's point size. Its natural home is a liquid FX major such as EURUSD on the M15 timeframe, the textbook environment for floor-pivot day trading.

Note: The seven pivot levels are calculated from the *previous completed daily bar* and recomputed only once when a new day begins. Throughout the trading session they remain fixed reference lines, which is what makes the strategy fully non-repainting.

How It Works

The Pivot Ladder

At the start of each day the EA reads yesterday's High (H), Low (L), and Close (C) and computes the standard floor-trader pivot set:

$$\begin{aligned} P &= (H + L + C) / 3 && \text{(central pivot)} \\ R1 &= 2P - L && S1 = 2P - H \\ R2 &= P + (H - L) && S2 = P - (H - L) \\ R3 &= H + 2(P - L) && S3 = L - 2(H - P) \end{aligned}$$

The seven values are then sorted into a strictly ascending ladder of support and resistance lines:

$$S3 < S2 < S1 < P < R1 < R2 < R3$$

The previous day's range ($H - L$) is stored as the single **scale unit**. Both the touch zone and the stop buffer are expressed as fractions of this range, which lets the same parameter values behave sensibly across very different instruments and volatility conditions.

Entry Logic

The EA acts only once per newly-closed primary bar. When a bar closes it inspects that candle for evidence that a pivot line just acted as support or resistance:

- **Long (bounce):** a *bullish* candle (close above open) whose low dipped to — or pierced — a pivot line (within the touch zone) but whose close finished back *above* that line. The level acted as support that held. The EA scans from the top of the ladder downward and takes the highest such level, then buys at the Ask.
- **Short (rejection):** a *bearish* candle (close below open) whose high spiked to — or pierced — a pivot line (within the touch zone) but whose close finished back *below* that line. The level acted as resistance that held. The EA scans from the bottom of the ladder upward and takes the lowest such level, then sells at the Bid.

The **touch zone** is $\text{ZoneFrac} \times (\text{previous day's range})$ — it defines how close the candle's extreme must come to a pivot to count as a genuine touch of that level.

Exit Logic — Stop Loss & Take Profit

Both exits are placed as real structural levels at order submission; no trailing or indicator-based exit is used.

- **Take Profit** is the *next pivot line* in the direction of the trade — the adjacent level up for a long, or down for a short. This produces a clean pivot-to-pivot trade. If a long forms on the very top line (R3) or a short on the very bottom line (S3), the target is extrapolated one equivalent gap beyond.

- **Stop Loss** sits just beyond the held level *and* the signal candle's extreme — for a long, below the lower of (the level, the candle low) minus the buffer; for a short, above the higher of (the level, the candle high) plus the buffer. The **buffer** is $\text{StopBufferFrac} \times (\text{previous day's range})$.

Trade Filters

- **Reward : Risk filter** — a setup is only taken if $\text{reward} \div \text{risk} \geq \text{MinRewardRisk}$. Because the take-profit is a fixed structural target, setups whose nearest pivot is too close to be worth the structural stop are automatically rejected.
- **Spread filter** — new entries are skipped whenever the current spread (in points) is wider than MaxSpreadPoints .
- **One position per magic** — only a single position is held at a time; the structural stop and pivot target manage the exit, and no new trade is opened until the current one closes.

Worked example — a long bounce off S1

Suppose yesterday produced S1 at 1.08200 and the pivot P at 1.08600, with a daily range of 0.00800. With $\text{ZoneFrac} = 0.05$ the touch zone is 0.00040 and with $\text{StopBufferFrac} = 0.10$ the buffer is 0.00080. A bullish M15 candle dips to a low of 1.08210 (inside the zone above S1) but closes at 1.08320 — back above S1. The EA buys at the Ask, sets the take-profit at the next pivot up (P = 1.08600) and the stop below the candle low minus the buffer (≈ 1.08130). With reward ≈ 0.00280 and risk ≈ 0.00190 the reward:risk of ~ 1.47 clears the 1.00 minimum, so the trade is taken.

Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



Illustrative example only. Actual market behaviour varies.

Parameters

| Parameter | Default | Description |
|-----------------|---------|--|
| ZoneFrac | 0.05 | Touch-zone width as a fraction of the previous day's range — how close a candle's extreme must come to a pivot line to count as a touch of that level. Range 0.01–0.20, step 0.01. |
| StopBufferFrac | 0.10 | Stop-loss buffer placed beyond the held level / signal-candle extreme, as a fraction of the previous day's range. Range 0.02–0.50, step 0.02. |
| MinRewardRisk | 1.00 | Minimum acceptable reward-to-risk ratio (target distance ÷ stop distance). Setups whose nearest pivot target is too tight are rejected. Range 0.30–3.00, step 0.10. |
| MaxSpreadPoints | 100 | Skip new entries when the current spread (in points) is wider than this value. Integer, range 5–300, step 5. |
| Lots | 0.10 | Fixed trade volume in lots. Range 0.01–1.00, step 0.05. |
| Magic | 8801 | Magic number used to identify and manage this EA's own positions. Integer, range 0–9,999,999, step 1. |

Recommended Settings

Floor Pivot Reversion is designed for liquid instruments where intraday price respects the floor-pivot ladder. The defaults reflect the strategy's textbook environment.

- **Symbol:** a liquid FX major such as EURUSD (other majors and liquid indices can also be tested).
- **Timeframe:** M15 — frequent enough to catch intraday bounces while the daily pivots stay relevant.
- **Account:** a tight-spread account; keep `MaxSpreadPoints` aligned with your broker's typical spread so genuine setups are not skipped.
- **Reward:Risk:** the default `MinRewardRisk = 1.00` accepts roughly balanced setups; raise it to be more selective and filter out shorter pivot-to-pivot moves.

Tip: Because every distance is scaled by the previous day's range, the same parameter set transfers across symbols without re-tuning the point size. Before going live, run the EA in the Strategy Tester on your chosen symbol and timeframe, then forward-test on a demo account.

How to Install on MetaTrader 5

- 1 Copy `FloorPivotReversion.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

Risk Warning

Trading foreign exchange, CFDs, and other leveraged financial instruments involves substantial risk of loss and is not suitable for all investors. The strategies and tools described in this document are provided for **educational purposes only** and do not constitute financial advice, investment recommendations, or solicitation to trade. Always consult a qualified financial adviser before making trading decisions. Past backtest performance is not indicative of future results.

